<u>Information to be Included in 3.1 and 3.2 Timeline Assignment</u> – if instructions indicate you need to have a summary of the information, keep in mind it should be a <u>summary</u>, not 3 paragraphs long.

The format of the timeline can vary—set it up however you like; however, make sure you have all the information listed below in order to get full credit. **The timeline should be in chronological order—that's what makes it a timeline.** 

## Section 3.1

- Aristotle and Democritus' views on the atom (note they had two different views)
- Dalton's Atomic Theory include explanations of the following:
  - law of conservation of mass
  - law of definite proportions
  - o law of multiple proportions
  - 5 main points of Dalton's theory
  - The difference between Dalton's original theory and modern atomic theory (see p. 67).

## Section 3.2

- JJ Thomson's cathode ray tube experiment include a summary of what he did and what was discovered through his work.
- Millikan's oil drop experiment include a summary of what he did and what was discovered through his work.
- Rutherford's experiment include a summary of what he did and what was discovered through his work.
- Include information on what the atomic nucleus is made of (discuss protons, neutrons, and electrons).
- You should include the table 3-1 on page 74 on your timeline—you will be responsible for knowing the information in the table, including the names, charge, mass, and location of each particle in the atom. The table summarizes a good deal of what was discovered by Thomson, Millikan, and Rutherford.
- Additionally include interesting and pertinent information from the video Stephen Hawking:
  Cosmic Alchemy.